Applicant: David P. Prince U.S.S.N.: 10/734,395

In the Specification

Please replace the paragraph on page 32, line 12 with the following paragraph:

"FIGs. 19A-19C are details of a run-time image with illustrative features, including an example of a region of interest, in accordance with an embodiment of the invention. Figures 19A-19C illustrate enlarged views of a bridge-like feature 1900 in the solder paste 1903, and several typical non-paste (board) features. FIG. 19A is an enlarged view of a first portion of the run time image shown in FIG. 19B, and FIG. 19C is an enlarged view of a second portion of the run time image in FIG. 19B, including the bridge-like feature 1900 and solder paste 1903. The non-paste features include, for example, a bare board 1906, a bare trace 1910, the mask 1915 on the trace 1910, and the bare pad 1920. FIG. 19A and 19B also illustrate a gap 1920 1922 between a first solder pad 1925 and a second solder pad 1930. In this example, the solder paste 1903 is shifted to the right of the first solder pad 1925, into the gap 1920 1922."

Please replace the paragraph on page 32, line 27 with the following paragraph:

"Referring again to FIG. 18, the paste only image of FIG. 20B can be used for step 1810 and the gap region of interest 1920 1922 shown in FIGs. 19A and 20A can be used for step 1820, in at least one embodiment of the invention. However, it is possible in at least one embodiment to reverse steps 1820 and 1810--that is, to define the region of interest in the acquired image, then create a paste-only image of the region of interest only. Doing so may save processing time. In at least on embodiment of the invention, the paste-only conversion of step 1810 is performed over a region no bigger than that required to include all sub-regions as defined in step 1820."

Please replace the paragraph on page 36, line 25 with the following paragraph:

"Referring again to FIG. 21, in step 2140, the maximum value of a smoothed single dimensional array is first located. Predetermined thresholds (see 2225 of FIG. 22,

Applicant: David P. Prince

U.S.S.N.: 10/734,395

and graphic representation 2320 of FIG. 23C), which are also user specified, are then applied to the maximum value to determine whether any features "met" or exceed these limits, and if so, a bridge-like defect is detected by definition. For example, in FIG. 23C, the threshold is applied to determine whether any part of the smoothed projection exceeds the user-defined limit 2320, or 70% of the gap. In this example, 5 smoothed values or "hits" 2330 were found to be above the threshold 2320, the locations of which are marked with bars similar to 2310, for illustration. Of course, the threshold and sliding average width (in pixels) shown in FIG. 23C is purely illustrative, and other numbers are usable. Based on the application of the thresholds, possible bridges and/or bridge-like features are identified (step 2140 2150) and returned to step 1850 of FIG. 18."